

Claims

- [c1] A system for facilitating three-dimensional movement of a suspended object comprising:
- an object having a set of associated line support elements;
 - an X line coupled to a plurality of sides of said object and configured to move via said set of associated line support elements;
 - an X junction configured to relocate said X line to effectuate X movement of said object;
 - a Y line coupled to a plurality of sides of said object and configured to move via said set of associated line support elements;
 - a Y junction configured to relocate said Y line to effectuate Y movement of said object; and,
 - a Z movement device configured to displace said X line and said Y line to effectuate Z movement of said object.
- [c2] The system of claim 1 wherein said set of line support elements allow said X line and said Y line to pass through said set of line support elements.
- [c3] The system of claim 1 wherein said set of line support elements comprise components which control movement

of said X line and said Y line.

- [c4] The system of claim 1 further comprising:
said X junction comprising an X movement motor having an X movement device coupled with said X line;
said Y junction comprising a Y movement motor having a Y movement device coupled with said Y line; and,
a Z movement motor coupled with said Z movement device.
- [c5] The system of claim 4 further comprising an electrical generator and electronic drive units coupled to said X movement motor and said Y movement motor and said Z movement motor.
- [c6] The system of claim 1 further comprising a dynamometer for measuring the tension of said Z movement device.
- [c7] The system of claim 1 further comprising an isolator associated with said object.
- [c8] The system of claim 6 wherein said isolator comprises passive stabilization.
- [c9] The system of claim 6 wherein said isolator comprises active stabilization.
- [c10] The system of claim 6 wherein said isolator comprises active stabilization in at least one first axis and passive

stabilization in at least one second axis.

- [c11] The system of claim 6 where said isolator is configured to support a vertical camera assembly supported at approximately the center of gravity of said vertical camera assembly.
- [c12] The system of claim 6 wherein said isolator is configured to support a camera assembly away from the center of gravity of said camera assembly.
- [c13] The system of claim 1 wherein said object is coupled with a mechanical claw.
- [c14] The system of claim 1 wherein said object is coupled with a hoist or loader.
- [c15] The system of claim 1 wherein said object is coupled with a mining scoop.
- [c16] The system of claim 1 wherein said object further comprises a downward pointing camera for remotely viewing from the position of said object.
- [c17] The system of claim 1 wherein said object comprises at least one person.
- [c18] The system of claim 1 further comprising at least three supports.

- [c19] A method for facilitating three-dimensional movement of a suspended object comprising:
relocating an X line associated with a platform to effectuate X-movement of said platform;
relocating a Y line associated with said platform to effectuate Y-movement of said platform; and,
displacing said X line and Y line to effectuate Z-movement of said platform.
- [c20] The method of claim 19 further comprising:
isolating an object coupled to said platform from line movement.
- [c21] The method of claim 19 further comprising:
stabilizing an object passively coupled to said platform from line movement.
- [c22] The method of claim 19 further comprising:
stabilizing an object actively coupled to said platform from line movement.
- [c23] The method of claim 19 further comprising:
obtaining pictures from a photographic device coupled to said platform.
- [c24] A system for facilitating three-dimensional movement of a suspended object comprising:

means for relocating an X line associated with a platform to effectuate X-movement of said platform;
means for relocating a Y line associated with said platform to effectuate Y-movement of said platform; and,
means for displacing said X line and Y line to effectuate Z-movement of said platform.

[c25] The system of claim 24 further comprising:
means for isolating an object coupled to said platform from line movement.

[c26] The system of claim 24 further comprising:
means for stabilizing an object passively coupled to said platform from line movement.

[c27] The system of claim 24 further comprising:
means for stabilizing an object actively coupled to said platform from line movement.

[c28] The method of claim 24 further comprising:
means for obtaining pictures from a photographic device coupled to said platform.